

Family Environmental Fun Pack

Nature Drawing: Celery Bog Nature Area

A project of EDCI 506,
Environmental Education

Professor: Daniel P. Shepardson
Department of
Curriculum and Instruction
Purdue University



*In cooperation with
West Lafayette Parks and Recreation*

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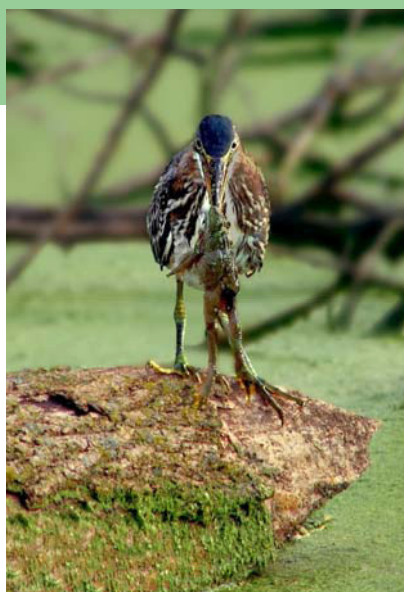
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The Family Environmental Fun Packs

The following Family Environmental Fun Packs are available for checkout from the Lilly Nature Center. It may require several visits to complete all of the activities in a pack.

Nature Drawing: Families explore Celery Bog Nature Area through observing and drawing the trees, wildlife, and landscapes of Celery Bog, learning simple drawing techniques. Families visit three different sites; requires about one hour per site.

The Scoop on Soils: Families explore the soils of Celery Bog Nature Area using soil science tools and techniques, learning about wetland and woodland soils. Families visit three different sites; requires about one hour per site.

Trees of Celery Bog: Families explore the trees of Celery Bog Nature Area using forestry tools and techniques, learning about sugar maples, black cherry, tulip and other trees that grow in the Celery Bog Nature Area. Families visit three different sites; requires about one hour per site.

Please return the pack to the Lilly Nature Center

Please stay on the trails unless completing an activity



Nature Drawing

Objectives

- Families will observe the natural world by using simple drawing techniques.
- Families will become familiar with wetlands and their value to the environment.
- Families will make personal connections to the natural world of Celery Bog Nature Area.



Background

Drawing can open doors to the natural world around you. You do not have to be a great artist to enjoy drawing and observing nature. You just need to be observant. Learning simple drawing techniques will help you better draw and observe the natural world. Drawing is the simplest, least expensive, and most direct medium for studying nature because the illustrator literally recreates what he/she sees. It is difficult for a person to care deeply about anything that he/she hasn't experienced or does not know much about. Nature drawing can be a powerful tool to aid learners in getting to know their natural community so that they can develop a sense of commitment.

OVERVIEW

- ☺ The simple act of drawing forces us to take the time to carefully observe the natural world.
- ☺ By learning a few simple sketching techniques, people of all ages will enjoy using drawing as a tool for investigating Celery Bog.
- ☺ Personal connections to the natural world will be developed as participants survey Celery Bog's trees, wildlife, and landscapes.

Ages: Elementary
through adult



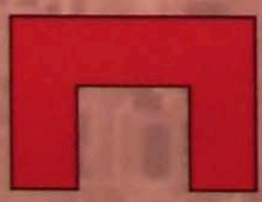
- mulched trail
- paved road to the Lilly Center
- B Bench
- LNC** Lilly Nature Center

Site 2

Site 1

Site 3

Celery Bog



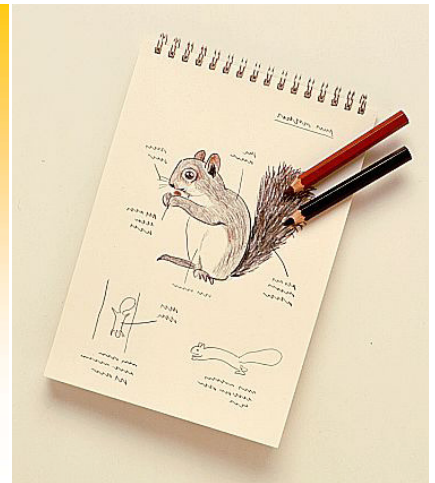
Site Map

Lindberg Road

Materials

Check for the following items in the backpack before starting:

- ___1. Clipboard and drawing paper
- ___2. Drawing supplies - water colors and graphite pencils, pastels, erasers, sharpeners, and a ruler
- ___3. Magnifying glasses
- ___4. A pair of binoculars
- ___5. Peterson field guide



Safety Note

1. Stay on the hiking path.
2. Avoid poison ivy. Not only does it grow on the ground but it also vines up on trees: you can get a rash even when the leaves are off.
3. Wear proper clothing and protect yourself from mosquitoes, chiggers, and ticks by using bug spray.



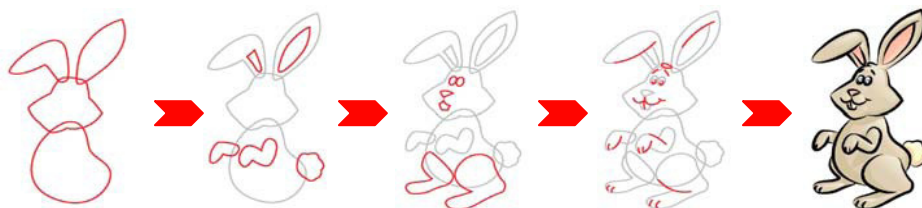
Actions

1. Following the Site Map, hike to Site #1 with the "Nature Drawing" backpack.
2. Complete the four basic drawing exercises: memory, contour, gesture, and detailed drawing. You should allow about an hour for this activity.
3. Continue on to Sites #2 and #3 which provide the opportunity to practice your new observation and drawing skills on trees (Site #2), landscapes and wildlife (Site #3). You should allow about an hour at each site.
4. Return to Site #1 to share and process your nature drawings.

"All of us are watchers - of television, of time clocks, of traffic on the freeway

- but few are observers. Everyone is looking, not many are seeing."

Peter M. Leschak,
wilderness firefighter and
novelist



Site 1

Basic Drawing Technique

Step One - Observation

➤ Find an object that attracts your attention. It should be small enough to hold in your hand like a stone, a twig, or seed pod. (Remember not to remove or harm any plant or animal life in the park.) Spend no more than 5 minutes examining it carefully and take a few more minutes to relax and take in the sounds, smells, and signs of life around you.

Step Two - Memory Drawing

➤ Close your eyes and take a minute to clear your mind. Then, concentrate on the object you have chosen. Memorize its features, key parts, and general shape. Accurately absorb all that you can about the object. How was it designed to function? How would its appearance change in different seasons?

➤ Place your small object out of sight and try to draw it from memory. Keep to a simple line drawing and limit yourself to about 10 minutes.

➤ The skills you are developing will serve you well in such instances as trying to draw a bird that visited for just a moment before flying away or a frog that hopped into the water as you approached.

Step Three - Contour Drawing

➤ Take another sheet of paper and draw the same object. This time, however, look only at the object and not at the paper. In your imagination, follow your eye over the entire surface of the object. Use a continuous line to draw the object. Do not lift your pencil from the page. Your mind will be guiding your drawing, not your eye. You will have no idea of the results until you peek at the completed drawing. Take no more than five minutes. The skills you are developing will serve you well when you are trying to capture the basic feeling or form of an object without being constrained by your mind telling you the way it "should" look.

"The very act of drawing an object, however how badly, swiftly takes the drawer from a woolly sense of what the object looks like to a precise awareness of its component parts."

Alain de Botton, novelist

Step Four - Gesture Drawing

➤ Use a maximum of twenty seconds to quickly sketch the object again. Concentrate only on the very general outline and features. Just capture the main idea of the object. Place lines over lines, not taking the time to erase errant lines.

➤ The skills you are developing will serve you well as you try to quickly capture the main features of a moving or flowing object. You are learning to connect the hand's response to the eye.

Step Five - Detailed drawing

➤ Before trying your hand at some of the other subjects in Celery Bog, take no more than twenty minutes to draw your object in great detail. The point of this exercise is that drawing technique is less important than scientific accuracy. Therefore, keep artistic expression to a minimum and use a solid line to make sure you have clearly defined the object. Draw your object to scale. Consider accuracy of shape, size, and proportion. Do not use shading.

➤ Begin with a light pencil sketch and then keep adding details until the twenty minutes has passed. When done, add several comments to the drawing concerning any key features that would help to identify the object. Include at least one question you have about the object. The skills you are developing will serve you well as you try to go beyond just drawing an object, to trying to learn about objects in nature. Now you are prepared to hike to the other sites to practice your new drawing skills.



Site 2 Drawing Trees

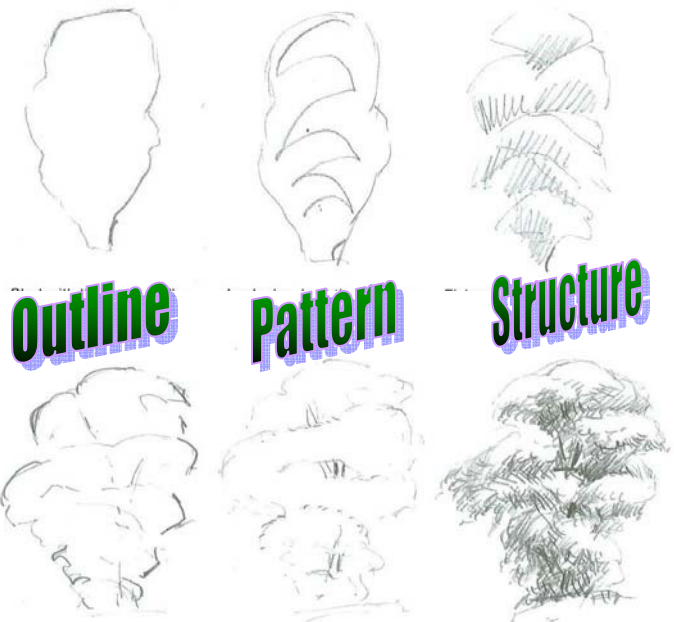
TIPS



Basic Steps

1. Start with basic outline of the tree.
2. Look closer at the patterns within the tree, how the branches and clumps of leaves are arranged.
3. Elaborate the structure by shading areas of dark and leaving space for the areas of light.

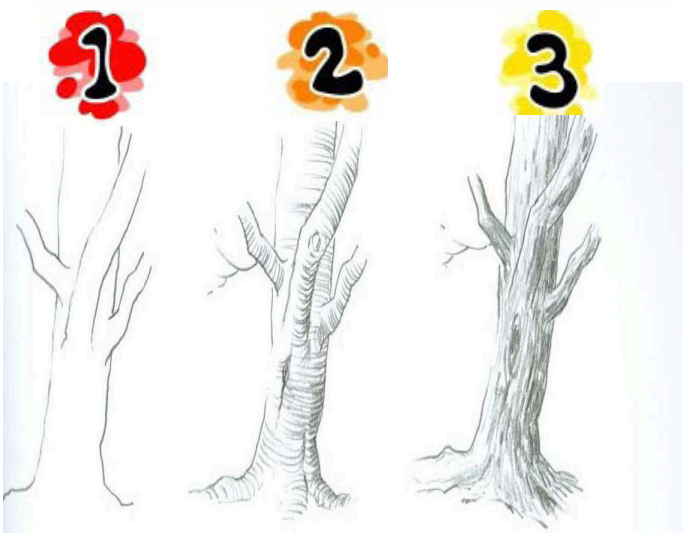
Celery Bog boasts a wide variety of trees. Each displays a variation in leaf type, bark characteristics, fruits, seeds, and overall shape. Trees that you'll see here include redbud and sassafras, several varieties of maple and oak, and hickories such as shagbark and pig-nut. Use your field guide to help you identify the trees that you draw.



Outline

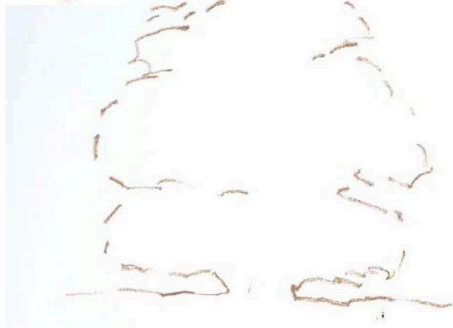
Pattern

Structure



Tree Trunk: Observe how the tree leans from its base and how the branches connect to the trunk, spread, and stay about the same size until they fork. Add curving lines around the tree. They should arc upwards as you look up the tree and downward as you look down the tree. They should swoop under each branch and into each hollow.

1



2



Summer Trees:

➤ Use brown to lightly outline the entire tree. Divide the tree into clumps of foliage. Look for the direction of the sun and shade the tree. Use an eraser or water to lift out some of the color to lighten some areas and create the holes through which you can see sky and branches.

3



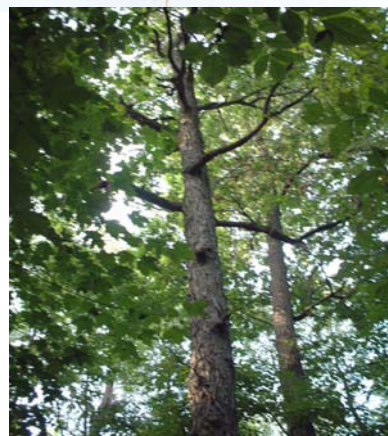
Winter Trees:

➤ It is easy to draw a winter tree. Only branches and skeleton structures are exposed. Use a charcoal pencil and close your eyes half-way to simplify the tree structure and shape.



Spring Trees:

➤ Lightly sketch the tree and then draw the tree framework, with brown, lightening and thinning the branches with your eraser. Splatter on a light green color to show the emerging foliage. It should be paler on the side facing the sun.



Fall Trees:

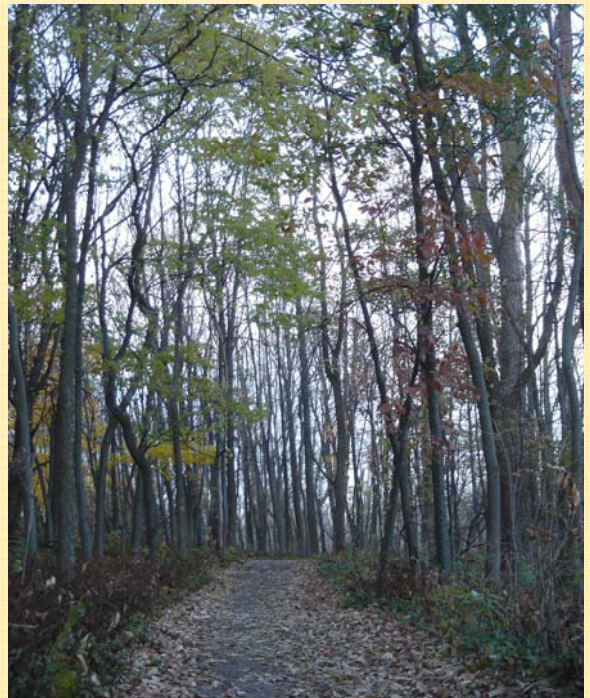
➤ Color orange and yellow leaves over a brown tree framework. Leave spaces for brighter areas of foliage - which you will add with orange pastels. Be sure to let plenty of sky show through the tree, emphasizing its loss of leaves.



Site 3

LANDSCAPES

Celery bog is a wetland that has water logged soil. The soil is rich in nutrients because it has been filled by sediment and vegetation for over 15,000 years. This makes it an important nutrient source for plants and a suitable habitat for many animal species. To draw landscapes at Celery Bog, you will want to consider distance, the foreground, and how to create depth as you move from one to the other.



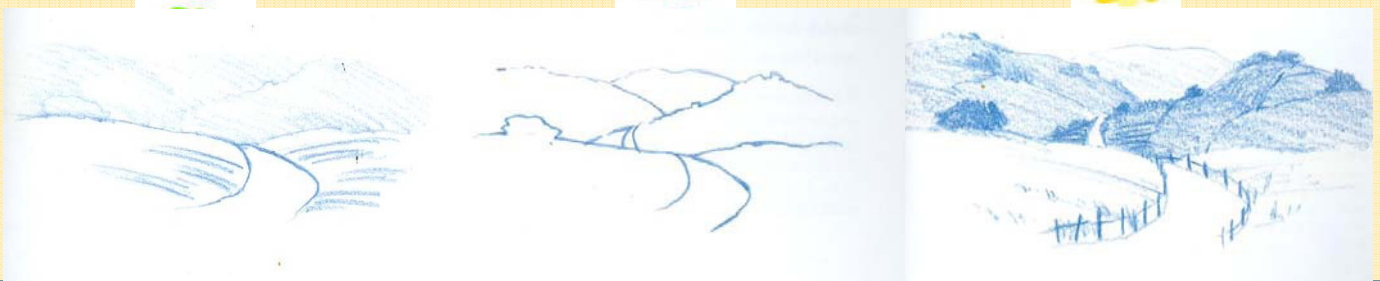
Distance: To get a good sense of depth, remember that the farther away objects are, the paler and smaller you should draw them. Notice in this picture that the rocks and grasses in the foreground are bigger than the distant trees.



Components

- *Distance*
- *Create Depth*
- *Foreground*

Creating depth: Begin with the main outline of the landscape. In the foreground, the contrasts are sharpest, so press down hard with your pencil. Notice!! here that the grass and fence is larger than the distant features. trees.



1



Foreground: Putting pathways, river-banks, or an edge of some sort into your drawing will lead the eye from the foreground into the middle or distant portions of the landscape. If you are drawing water, use ripple marks, submerged pebbles or rocks, or even water plants to create foreground and background.

2



3



Wetlands: Lightly sketch the main elements with charcoal pencil. Begin with your lightest color, like yellow, and use parallel strokes to shade across the trees and land features. Begin to add lighter shades of green. Use the darker green for bushes and to emphasize the bank and water reflection. Use dark blue to shade the trees on one side, and for their reflections in the water. Use a few short strokes to emphasize the landforms nearest to the viewer and to bring them forward. Notice how dark the reeds in the foreground have been drawn. Look at the sunlight and shade as realistically as possible.

1



4



2



3



Site 3 Animal Drawings

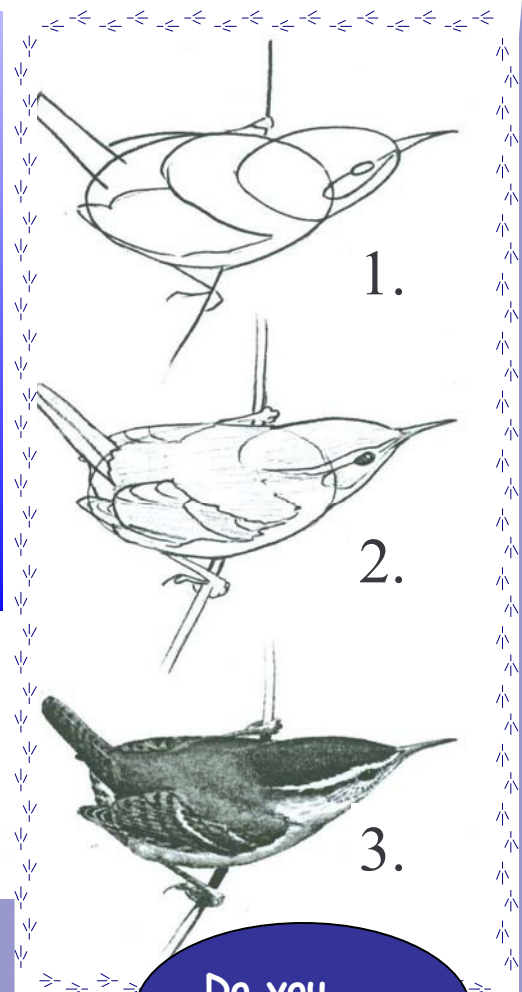
There are many animals in Celery Bog, including 292 species of birds. Some of the most common are the large blue heron, ducks, geese, woodpeckers, and hawks. Some birds stay in Celery Bog all year while some just visit seasonally. Snakes, spiders, bees, butterflies, dragonflies, deer, frogs, raccoons, turtles, grasshoppers, squirrels, rabbits, and salamanders are among the many other wildlife species that live in the area.

TIP

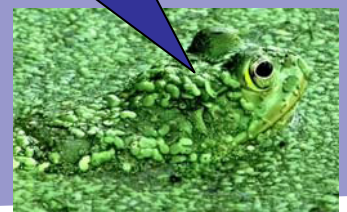
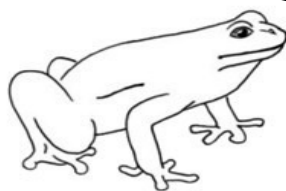
1. Study the animal carefully. Observe the characteristic gestures, the basic shape, and the color patterns.
2. Estimate its size and draw the outline of main structures. When drawing a bird, use an oval shape for the body, and then add the head, legs, tail, feathers, and wings proportionally to its size. Try to capture the angles of the body, the directions and placements of the head, tail, wings, and other features.
3. Add more detail, such as body coverings. Color the animal as you see it. Use a charcoal pencil to highlight the darker parts and lighten other parts.



Ducks are quite common in Celery Bog. Some migrate here for breeding purposes in the spring, while others leave Celery Bog for ice-less bodies of water further south in the winter. Wetlands provide the perfect place for brooding due to the abundant food sources and plentiful nesting sites. When you draw a duck in the water, really set it into and beneath the surface. Add ripples of water and reflections on the water surface.



Do you
see me?



History of Celery Bog Nature Area

More than 16,000 years ago retreating glaciers created the basin which led to the formation of Celery Bog. Over the course of thousands of years, this area has experienced many transitions through various ecological communities, including once functioning as a type of wetland called a bog.



Celery Bog was converted to farmland in the 20th century (1900s). Celery as well as other crops were grown in the rich peat of the drained wetland. In order to farm the wetland, the water had to be drained using tile drains. Tile drains are porous pipes that allow water within the soil to enter and flow out through the pipes. This prevents the soil from becoming waterlogged. This agricultural drainage system, however, constantly failed and resulted in the termination of farming in the wetland. Over time, the farmland gradually reverted back to wetland conditions, and now closely resembles a marsh ecosystem.

The wetland and surrounding area are now preserved as the Celery Bog Nature Area. As a wetland, it serves several important functions. First, it acts as a sponge to soak up water, reducing floods and recharging the ground water. Secondly, it filters pollutants and traps sediments, improving water quality; and thirdly it provides habitat for countless wildlife species.

Celery Bog Nature Area offers year round opportunities for families to experience the local ecological communities that are being restored and managed within the park. Nature trails wind through the area, providing for close observation and appreciation of the trees and wildlife of the Midwest.

Additional information about Celery Bog Nature Area
and West Lafayette Parks and Recreation
may be found at the following websites:

www.purdue.edu/eas/geomorph/research/celerybog/homepage.html

www.westlafayette.in.gov/parks